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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/553,043	04/20/2000	Noah Clinch	772/7321-2	5393

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EXAMINER

DASTOURI, MEHRDAD

ART UNIT PAPER NUMBER

2623

DATE MAILED: 01/29/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/553,043

Applicant(s)

CLINCH ET AL. 2

Examiner

Mehrdad Dastouri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicants' amendment filed October 31, 2003, has been entered and made of record.
2. 35 U.S.C. 112 second paragraph rejection of Claim 1 has been withdrawn in view of Applicants' amendment.
3. Applicants' arguments have been fully considered. Applicants argue in essence that Jansson only images a selected portion of the specimen at high magnification/resolution.

The Examiner disagrees and indicates that Jansson teaches preparing a single high-resolution, wide-field-of-view of the whole specimen (Abstract; Column 2, Lines 3-51). The single high-resolution, wide-field-of-view of the whole specimen will be generated by preparing high-resolution mosaic image of the image segments of the specimen (Figure 2; Column 5, Lines 15-38, Column 6, Lines 1-37 and table of Variable Definitions). Claim language does not recite preparing the high-resolution image by a single scanning. Claim language does not limit the microscope to possess only one high power objective lens. It is further submitted that selection of the magnification of a microscope objective lens is a design choice, and without explicitly identifying the particular purpose and function of the high power objective lens it is not considered a patentable limitation.

Further Applicants' arguments are moot in view of new grounds of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-6, 8-18, 24 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansson et al., (hereinafter Jansson), US 4673988 and Novik, US 5432871.

As per Claim 1, Jansson teaches analyzing a specimen in the microscopic field of view (col. 1, lines 12-17; col. 5, lines 5-6); therefore, it is apparent that the slide must be a specimen on a microscopy slide, prepared to be analyzed. Inherently, the complete specimen occupies an area of the microscopy slide.

Jansson goes on to teach:

placing the slide upon the stage of a microscope equipped with a high power objective lens (col. 5, lines 5-17), digital imaging apparatus (video camera, col. 3, line 66) and motorized stage (col. 4, lines 18-39); imaging said area of the microscopy slide to obtain data for a composite (mosaic) high resolution image of the whole specimen (Abstract; col. 2, lines 3-51; col. 5, line 33-col. 6, line 15).

Although Jansson allows access to the datastore from a terminal (recalled, col. 9, lines 1-9), and digitally obtaining a relatively low resolution copy of the image (col. 3, lines 33-37); and storing high resolution and low resolution images in a datastore (disk,

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col. 9, lines 6-8). It is with respect to the following limitations that Jansson begins to diverge from teaching the instant invention. Novik teaches these limitations.

Novik disclose system and methods for interactive image data acquisition comprising:

digitally processing the high resolution image data to obtain data for a relatively low resolution copy of a complete specimen image (col. 1, lines 61-68);

transferring the low resolution copy of the image data from the datastore to a terminal for displaying a corresponding low resolution image, as a navigation map, upon a monitor of the terminal (Figures 1 and 2; col. 1, lines 61-68; col. 8, lines 34-67, col. 9, lines 1-19; col. 9, line 58 through col. 11, line 11);

and, in response to a selection, by a user of the terminal, of an area of the navigation map, transferring corresponding high resolution image data for the selected area of the image from the datastore to the terminal (Figures 1 and 2; col. 1, lines 61-68; col. 8, lines 34-67, col. 9, lines 1-19; col. 9, line 58 through col. 11, line 11; in particular, col. 9, lines 17-19 and 58-60).

It would have been obvious to one of ordinary skill in the art to use the interactive image data acquisition system of Novik to modify the Jansson's invention to implement further limitations of Claim 1 because it will expedite the user the ability to access the large volumes of image data and decrease the transmission time and cost of transmitting images for remote analysis (Novik; col. 2, lines 15-32).

As per Claim 2, Novik teaches:

The method according to Claim 1, wherein the terminal is a remote terminal (Figure 1, receiving terminal 104).

As per Claim 3, Novik teaches:

the method according to Claim 1, further comprising the step of recording the areas of the low resolution image data that are selected, for review of performance of said user (Figure 2, steps 204-211; col. 8, line 34 to col. 10, line 57).

As per Claim 4, Jansson teaches:

the method according to Claim 1, wherein the step of imaging comprises obtaining continuous sequence of successive images of the specimen by advancing the field of view (col. 4, 11. 23-39) of the high power objective lens of the microscope stepwise across the specimen and acquiring an image of each field of view (col. 1, lines 7-11, col. 2, lines 35-37, fig. 1, elements 30, 34, 36, and 38).

As per Claim 5, it recites substantially the same limitations as claim 1 above and analogous remarks apply.

As per Claim 6, Novik teaches using a digital camera (image data source 110; Fig. 1, element 110, col. 5, lines 17-27).

As per claim 8, it recites substantially the same limitations as Claim 3 above and analogous remarks apply.

As per Claim 9, Jansson teaches:

the apparatus according to Claim 8, wherein the recording means is a data storage disk, such as a floppy disk (col. 9, lines 6-9).

With regards to Claims 10-15, arguments analogous to those presented for Claim 1 are applicable to Claims 10-15. Novik further disclose the processing comprise digital image compression (Figure 1, compression processor 116).

With regards to Claims 16-18, arguments analogous to those presented for Claims 1-3 are applicable to Claims 16-18.

With regards to Claims 24 and 25, arguments analogous to those presented for Claim 1 are applicable to Claims 24 and 25.

6. Claims 7 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jansson and Novik, as applied to claims 1, 2, 4, and 5 above, further in view of Finarov, US 5604344.

As per Claim 7, neither Jansson nor Novik teach moving the objective lens to provide automatic focusing. However, Finarov teaches:

means for moving the objective lens of the microscope in order to provide automatic focusing. (col. 1, ll. 27-31, 44-49, col. 5, ll. 39-41).

With regards to Claims 19-23, arguments analogous to those presented for Claims 1-3 and 7-9 are applicable to Claims 19-23.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehrdad Dastouri whose telephone number is (703) 305-2438. The examiner can normally be reached on Monday to Friday from 8:00 a.m. to 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703) 308-6604.

The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center Customer Service Office whose telephone number is (703) 306-0377.

Mehrdad Dastouri
Primary Examiner
Group Art Unit 2623
January 25, 2004

MEHRDAD DASTOURI
PRIMARY EXAMINER

Mehrdad Dastouri